abcam

ab327348

# Anti-IL-17RA Receptor antibody [EPR29928-548] - BSA and Azide free, low endotoxin

Recombinant | RabMAb | Advanced Validation | KO Validated

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | pH: 7.2 - 7.4 Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Carrier free** | Yes |
| **Clone number** | EPR29928-548 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 1.048 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/500 |

| | |
|---|---|
| **Notes** | - |

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | 1/500 |
| **Notes** | - |

### Not recommended

| | |
|---|---|
| **Species** | Recombinant fragment - Human |
| **Dilution info** | - |
| **Notes** | - |

## FuncS

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1 µg for $10^4$ Cells |
| **Notes** | - |

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | 1 µg for $10^4$ Cells |
| **Notes** | - |

### Not recommended

| | |
|---|---|
| **Species** | Recombinant fragment - Human |
| **Dilution info** | - |
| **Notes** | - |

## I-ELISA

### Tested

| | |
|---|---|
| **Species** | Recombinant fragment - Human |
| **Dilution info** | - |

| | |
|---|---|
| **Notes** | - |

### Expected

| | |
|---|---|
| **Species** | Human, Mouse |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## WB

### Not recommended

| | |
|---|---|
| **Species** | Human, Mouse, Recombinant fragment - Human |
| **Dilution info** | - |
| **Notes** | - |

## IHC-P

### Not recommended

| | |
|---|---|
| **Species** | Human, Mouse, Recombinant fragment - Human |
| **Dilution info** | - |
| **Notes** | - |

## ICC/IF

### Not recommended

| | |
|---|---|
| **Species** | Human, Mouse, Recombinant fragment - Human |
| **Dilution info** | - |
| **Notes** | - |

# Target data

See full target information IL17RA

| | |
|---|---|
| **Function** | Receptor for IL17A and IL17F, major effector cytokines of innate and adaptive immune system involved in antimicrobial host defense and maintenance of tissue |

integrity. Receptor for IL17A (PubMed:17911633, PubMed:9367539). Receptor for IL17F (PubMed:17911633, PubMed:19838198). Binds to IL17A with higher affinity than to IL17F (PubMed:17911633). Binds IL17A and IL17F homodimers as part of a heterodimeric complex with IL17RC (PubMed:16785495). Also binds heterodimers formed by IL17A and IL17F as part of a heterodimeric complex with IL17RC (PubMed:18684971). Cytokine binding triggers homotypic interaction of IL17RA and IL17RC chains with TRAF3IP2 adapter, leading to TRAF6-mediated activation of NF-kappa-B and MAPkinase pathways, ultimately resulting in transcriptional activation of cytokines, chemokines, antimicrobial peptides and matrix metalloproteinases, with potential strong immune inflammation (PubMed:16785495, PubMed:17911633, PubMed:18684971, PubMed:21350122, PubMed:24120361). Involved in antimicrobial host defense primarily promoting neutrophil activation and recruitment at infection sites to destroy extracellular bacteria and fungi (By similarity). In secondary lymphoid organs, contributes to germinal center formation by regulating the chemotactic response of B cells to CXCL12 and CXCL13, enhancing retention of B cells within the germinal centers, B cell somatic hypermutation rate and selection toward plasma cells (By similarity). Plays a role in the maintenance of the integrity of epithelial barriers during homeostasis and pathogen infection. Stimulates the production of antimicrobial beta-defensins DEFB1, DEFB103A, and DEFB104A by mucosal epithelial cells, limiting the entry of microbes through the epithelial barriers (By similarity). Involved in antiviral host defense through various mechanisms. Enhances immunity against West Nile virus by promoting T cell cytotoxicity. Contributes to Influenza virus clearance by driving the differentiation of B-1a B cells, providing for production of virus-specific IgM antibodies at first line of host defense (By similarity). Receptor for IL17C as part of a heterodimeric complex with IL17RE (PubMed:21993848). (Microbial infection) Receptor for SARS coronavirus-2/SARS-CoV-2 virus protein ORF8, leading to IL17 pathway activation and an increased secretion of pro-inflammatory factors through activating NF-kappa-B signaling pathway.

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | +4°C |

## Notes

**Patented technology**
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

**What are the advantages of a recombinant monoclonal antibody?**
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

**Conjugation ready**
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

**Compatibility**
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

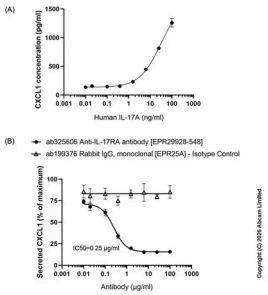
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

## 6 product images



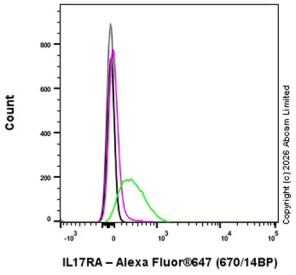

## Functional Studies - Anti-IL-17RA Receptor antibody [EPR29928-548] - BSA and Azide free, low endotoxin (ab327348)

CXCL1 secretion in HT-29 cells following stimulation with IL-17A (Abcam, ab282392) in the presence of either an anti-IL-17RA antibody (ab325606) or an IgG isotype control (ab199376).

(A) Dose–response curve of HT-29 cells exposed to increasing concentrations of IL-17A.

(B) CXCL1 secretion induced by 100 ng/mL human IL-17A following treatment with anti-IL-17RA antibody (circles, solid line) or IgG isotype control (triangles, dotted line) across a range of concentrations. The $IC_{50}$ for inhibition of CXCL1 secretion is 0.25 µg/mL.

HT-29 cells were seeded at $1 \times 10^4$ cells per well in a 96-well plate. Cells were pre-incubated with a dilution series of anti-IL-17RA antibody for 6 hours prior to IL-17A stimulation and then cultured for 48 hours in medium containing 10% FBS. CXCL1 levels were measured using a Human CXCL1 (GROα) ELISA kit (Abcam, ab190805).



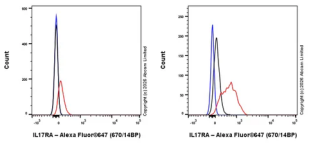

## Flow Cytometry - Anti-IL-17RA Receptor antibody [EPR29928-548] - BSA and Azide free, low endotoxin (ab327348)

IL-17RA Receptor Flow Cytometry staining using rabbit Anti-IL-17RA Receptor antibody

Flow cytometric analysis of Parental HAP1(HOWT01) (human chronic myelogenous leukemia near-haploid cell) (Green and black) IL17RA KO HAP1(HO010217) (Magenta and grey) cells labelling IL-17RA Receptor with ab327348 at 1/500 dilution (0.1ug) / Magenta and Green compared with a Rabbit monoclonal IgG (ab172730) / Black and Grey isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat anti-Rabbit IgG (Alexa Fluor® 647, ab150083) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells.



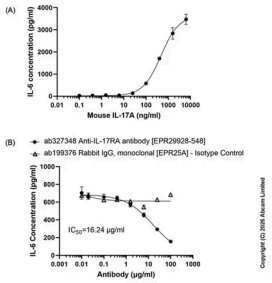
## Flow Cytometry - Anti-IL-17RA Receptor antibody [EPR29928-548] - BSA and Azide free, low endotoxin (ab327348)

IL-17RA Receptor Flow Cytometry staining of THP-1 (human monocytic leukemia monocyte, Right) using rabbit Anti-IL-17RA Receptor antibody

Flow cytometric analysis of MOLT-4 (human lymphoblastic leukemia T lymphoblast, Left) THP-1 (human monocytic leukemia monocyte, Right) cells labelling IL-17RA Receptor with ab327348 at 1/500 dilution (0.1ug) / Red compared with a Rabbit monoclonal IgG (ab172730) / Black isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

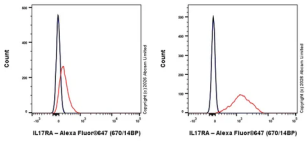
Goat anti-Rabbit IgG (Alexa Fluor® 647, ab150083) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells. Low expression: MOLT-4.




## Functional Studies - Anti-IL-17RA Receptor antibody [EPR29928-548] - BSA and Azide free, low endotoxin (ab327348)

IL-6 secretion in NIH/3T3 cells following stimulation with IL-17A in the presence of either an anti-IL17RA antibody (ab327248) or an IgG isotype control (ab199376). (A) Dose–response curve of NIH/3T3 cells exposed to increasing concentrations of IL-17A. (B) IL-6 secretion induced by 1000 ng/mL mouse IL-17A following treatment with anti-IL17RA antibody(circles, solid line) or IgG isotype control (triangles, dotted line) across a range of concentrations. The $IC_{50}$ for inhibition of IL-6 secretion is 16.24 µg/mL. NIH/3T3 cells were seeded at 1 × $10^4$cells per well in a 96-well plate. Cells were pre-incubated with a dilution series of anti-IL17RA antibody for 6 hours prior to IL-17A stimulation and then cultured for 48 hours in medium containing 10% FBS. IL-6 concentrations were measured using a Mouse IL-6 ELISA Kit (Abcam, ab222503).



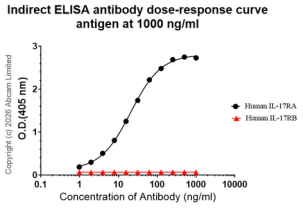

## Flow Cytometry - Anti-IL-17RA Receptor antibody [EPR29928-548] - BSA and Azide free, low endotoxin (ab327348)

IL-17RA Receptor Flow Cytometry staining of EL4 (mouse lymphoma T lymphocyte, Right) using rabbit Anti-IL-17RA Receptor antibody

Flow cytometric analysis of NIH/3T3 (mouse embryonic fibroblast, Left) EL4 (mouse lymphoma T lymphocyte, Right) cells labelling IL-17RA Receptor with ab327348 at 1/500 dilution (0.1ug) / Red compared with a Rabbit monoclonal IgG (ab172730) / Black isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat anti-Rabbit IgG (Alexa Fluor® 647, ab150083) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells. Low expression: NIH/3T3.




## Indirect ELISA - Anti-IL-17RA Receptor antibody [EPR29928-548] - BSA and Azide free, low endotoxin (ab327348)

Indirect ELISA analysis of ab325606 at 1000-0 ng/ml. The Secondary antibody used was Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1:2500 dilution dilution.

Antigen: Human IL-17RA;Human IL-17RB.

Antigen concentration: 1000 ng/ml

This antibody does not cross-react with recombinant human IL-17RB by ELISA.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab325606).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.